

Claims

- 1 1. A method to coat a substrate, comprising:
2 acquiring a substrate as particles; and
3 coating each of the particles with a color mixture including at least one of
4 a thermochromatic compound, a phosphorescent compound, and a luminescent
5 compound.
- 1 2. The method of claim 1 further comprising:
2 washing the particles before coating; and
3 drying the particles before coating.
- 1 3. The method of claim 1 wherein the acquiring further includes crushing
2 the substrate, wherein the substrate is at least one of glass substrate, stone
3 substrate, mineral substrate, sand substrate, slag substrate, and a filler substrate
4 used in another product.
- 1 4. The method of claim 1 wherein the coating further includes coating the
2 particles with a color mixture that also includes a colorant which includes at least
3 one of dyes, pigments, and polymers.
- 1 5. The method of claim 4 wherein the coating further includes coating the
2 particles with a color mixture that includes 10% to 90% of the universal resin,
3 1% to 20% of the curing agent, 0.1% to 5% of the flow modifier, 0.1% to 40% of
4 the colorant, and 1% to 40% of the thermo chromatic compound, the
5 phosphorescent compound, or luminescent compound.
- 1 6. The method of claim 1 wherein the coating further includes spraying the
2 mixture onto the particles.
- 1 7. The method of claim 1 wherein the coating further includes submersing
2 the particles into the mixture.

- 1 8. A method to coat a substrate, comprising:
2 coating a substrate with a mixture, wherein the mixture includes a
3 universal resin, a solvent, a flow modifier, an adhesion modifier, a curing agent,
4 a colorant, and at least one of a thermochromatic compound, a phosphorescent
5 compound, and a luminescent compound; and
6 curing the coated substrate.
- 1 9. The method of claim 8 wherein in the coating further includes coating the
2 substrate with the mixture, wherein the mixture includes 10% to 90% of the
3 universal resin, 1% to 20% of the curing agent, 0.1% to 40% of the solvent,
4 0.1% to 5% of the flow modifier, 0.1% to 5% of the adhesion modifier, 0.1% to
5 40% of the colorant, and 1% to 40% of the thermo chromatic compound,
6 phosphorescent compound, or luminescent compound.
- 1 10. The method of claim 8 wherein the coating further includes, melting the
2 substrate and mixing the melted substrate with the mixture.
- 1 11. The method of claim 8 wherein the coating further includes spraying the
2 mixture onto the substrate.
- 1 12. The method of claim 8 wherein the coating further includes, brushing the
2 mixture onto the substrate.
- 1 13. The method of claim 8 wherein the coating further includes, coating the
2 mixture onto the substrate, wherein the substrate is applied to a roofing shingle.
- 1 14. The method of claim 8 wherein the coating further includes, coating the
2 mixture onto the substrate, wherein the substrate is at least one of a glass
3 substrate, a filler substrate used in other products, a stone substrate, a rock
4 substrate, a slag substrate, an inorganic substrate, and a substrate associated with
5 a finished product.

1 15. A method to coat a substrate, comprising:
2 creating a mixture including a universal resin, a colorant, a curing agent,
3 a flow modifier, and at least one of a thermochromatic compound, a
4 phosphorescent compound, and a luminescent compound; and
5 applying the mixture to a substrate.

1 16. The method of claim 15 wherein the applying further includes, applying
2 the mixture by at least one of spraying the mixture onto the substrate, brushing
3 the mixture onto the substrate, submersing the substrate into the mixture, and
4 mixing the mixture with a liquid version of the substrate.

1 17. The method of claim 15 wherein the applying further includes, applying
2 the mixture to the substrate which is a glass substrate mixed with paint, and
3 wherein the paint is further applied to another surface.

1 18. The method of claim 15 wherein the applying further includes, applying,
2 the mixture uniformly to the substrate.

1 19. The method of claim 15 further comprising subjecting the coated
2 substrate to temperature change which modifies a color property of the substrate.

1 20. The system of claim 15 further comprising mixing the coated substrate
2 into at least one of paint, a sealant, concrete, or an adhesive.